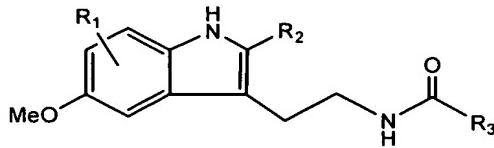


AMENDMENTS TO THE CLAIMS

1.-36. (Cancelled)

37. (New) A compound of the formula



wherein

R₁ is hydrogen, halo or nitro,R₂ is C₄-C₂₀ aryl, andR₃ is C₁-C₃₀ alkyl, C₂-C₂₂ alkenyl, C₄-C₂₀ aryl, OR₄, SR₄, NR₄R₅, (CH₂)_nOR₄, (CH₂)_nSR₄, (CH₂)_nNR₄R or (CH₂)_nCOR₅

wherein

n is 0-10;

R₄ and R₅, which can be the same or different, are hydrogen, C₁-C₈ alkyl, C₁-C₆ alkenyl or C₄-C₁₀ aryl.38. (New) The compound of claim 37, wherein R₃ is C₁-C₆ alkyl or C₁-C₆ alkoxy.39. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is methyl.40. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is ethyl.41. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is cyclopropyl.42. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is cyclobutyl.43. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is methoxy.

44. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is ethoxy.

45. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is amino.

46. (New) The compound of claim 37, wherein R₁ is hydrogen, R₂ is C₄-C₂₀ aryl, and R₃ is dimethylamino.

47. (New) The compound of any of claims 38-46, wherein R₂ is selected from the group consisting of phenyl, 4-(fluorophenyl), 3-(fluorophenyl), 2-(fluorophenyl), 4-(chlorophenyl), 3-(chlorophenyl), 2-(chlorophenyl), 4-(methylphenyl), 3-(methylphenyl), 2-(methylphenyl), 4-(methoxyphenyl), 3-(methoxyphenyl), 2-(methoxyphenyl), 4-(ethoxyphenyl), 3-(ethoxyphenyl), 2-(ethoxyphenyl), 4-(vinylphenyl), 4-(acetylphenyl), 3-(acetylphenyl), 2-(acetylphenyl), 4-(trifluoromethylphenyl), 3-(trifluoromethylphenyl), 4-(trimethylsilylphenyl), 3-(trimethylsilylphenyl), 4-(methylthiophenyl), 4-(*tert*-butylphenyl), 4-(dimethylaminophenyl), 4-(ethylphenyl), 4-(benzoxyphenyl), 4-(biphenyl), 2-furanyl, 2-(thiophenyl), 2-(5-methylthiophenyl), 3-(thiophenyl), 2-(indolyl), 1-(naphthalenyl), 2-(naphthalenyl), 4-(dibenzofuranyl), 1-(thianthrenyl), 2,3-(dichlorophenyl), 2,5-(dichlorophenyl), 3,4-(dichlorophenyl), 3,5-(dichlorophenyl), 2,3-(difluorophenyl), 2,4-(difluorophenyl), 2,5-(difluorophenyl), 2,6-(difluorophenyl), 3,4-(difluorophenyl), 3,5-(difluorophenyl), 3,5-(dibromophenyl), 3,5-(bis(trifluoromethyl)phenyl), 2,3-(dimethylphenyl), 2,5-(dimethylphenyl), 2,6-(dimethylphenyl), 3,5-(dimethylphenyl), 2,4-(dimethoxyphenyl), 2,5-(dimethoxyphenyl), 3,4-(dimethoxyphenyl), 2,3,4-(trimethoxyphenyl), 2,4,6-(trifluorophenyl), and 2,3,4,5,6-(pentafluorophenyl).

48. (New) The compound of claim 37, wherein the compound is N-(2-(2-(4-fluorophenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

49. (New) The compound of claim 37, wherein the compound is N-(2-(5-methoxy-2-methoxyphenyl-1*H*-indol-3-yl)ethyl)acetamide.

50. (New) The compound of claim 37, wherein the compound is N-(2-(5-methoxy-2-p-tolyl-1*H*-indol-3-yl)ethyl)acetamide.

51. (New) The compound of claim 37, wherein the compound is N-(2-(2-(4-*tert*-butylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

52. (New) The compound of claim 37, wherein the compound is *N*-(2-(2-(3-trifluoromethylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

53. (New) The compound of claim 37, wherein the compound is *N*-(2-(2-(4-trifluoromethylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

54. (New) A method for preparing the compound of claim 37, which method comprises reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

55. (New) A method for preparing the compound of claim 38, which method comprises reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

56. (New) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 37 and a pharmaceutically acceptable carrier or diluent.

57. (New) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 38 and a pharmaceutically acceptable carrier or diluent.

58. (New) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 37.

59. (New) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 38.

60. (New) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 37 and a pharmaceutically acceptable anesthetic carrier.

61. (New) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 38 and a pharmaceutically acceptable anesthetic carrier.

62. (New) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

63. (New) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

64. (New) The method of claim 63, wherein said administering is by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

65. (New) The method of claim 64, wherein said administering is by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

66. (New) A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

67. (New) A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

68. (New) A method for treating a condition affected by melatonin activity in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

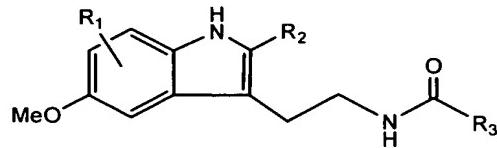
69. (New) A method for treating a condition affected by melatonin activity in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.

70. (New) The method of claim 69, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

71. (New) The method of claim 70, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune

disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

72. (New) A compound of the formula



wherein

R₁ is hydrogen or halo,

R₂ is C₄-C₂₀ aryl, and

R₃ is C₁-C₃₀ alkyl, C₂-C₂₂ alkenyl, C₄-C₂₀ aryl, OR₄, SR₄, NR₄R₅, (CH₂)_nOR₄, (CH₂)_nSR₄, (CH₂)_nNR₄R or (CH₂)_nCOR₅

wherein

n is 0-10;

R₄ and R₅, which can be the same or different, are hydrogen, C₁-C₈ alkyl, C₁-C₆ alkenyl or C₄-C₁₀ aryl.

This listing of claims replaces all prior versions, and listings, of claims in the application.